

THE REALM OF SCIENCE.

Prof. Wilhelm Wundt, the creator of experimental psychology, now in his seventy-fourth year, recently celebrated the fiftieth anniversary of his graduation with the doctor's degree.

A faintly luminous mist in the bulb and on the fingers has been noted by Prof. Sommers on rubbing electric light bulbs that have been not long in use. No satisfactory explanation has been

Paliadium, a rare substance little used, is the active agent in automatic gas lighting devices. Flame is produced as soon as the Illuminating gas strikes a pellet of asbestos covered with a mixture of palladium and finely givided platinum, known as platinum black.

If odors were solid particles, they would tend to form nuclei of cloudy condensation in supersaturated air. Dr. John Aitken has tested musk and 23 other odorous substances without finding such nuclei, and he concludes that odors are gaseous and that smell has gas as its fundamental basis.

Carrying out experiments in psychic phenomena, some scientists of Ruvo produced some striking results. A 14year-old boy was put in a trance, and in this condition answered questions put to him in Greek, Latin, Arabic, French, English, German, and conversed in those languages, his voice being that of a man.

In an attempt to liquefy helium, Prof. Olszewski recently produced the remarkably low temperature of 455 degrees below zero, Fahrenheit. It was done by suddenly expanding a mass of gas helium which had been subjected to a pressure of about 2,700 pounds to the square inch, in a temperature so low that it nearly solidified hydrogen. The helium showed no sign of liquefying.

It used to be that astronomy, with its stupendous magnitudes, incredible velocities and inconceivable distances, seemed to make the greatest demand on man's belief. To-day it is physics. We read, for instance, that Hertz's oscillations give rise to 500,000,000 oscillations per second. Where is the man who can conceive of anything happening in the five hundred millionth part of a second?-London Tel-

MEDICAL MATTERS.

Prof. Schweninger, famous as Bismarck's body physician, has resigned as head of the great infirmary near Berlin, and will devote the evening of his life to private practice, chiefly among the poor and destitute.

A Viennese, whose larynx was cut out for cancer, has invented a speaking apparatus made of a rubber pipe fitted with artificial vocal cords, which he inserts in his throat when he wishes to speak. He spoke before the Viennese Medical society at its last setto, but what he said was easily understood.

the Japanese navy, has arrived in San Francisco and will proceed to the Atlantic coast. He will deliver at Columbia college, New York, and Jefferson medical college, Philadelphia, a series of lectures on military canitation. His son is studying finance and commerce in the University of Pennsylvania. The baron is credited with having arranged the admirable hospital methods which were so conspicuous in the war with Russia. He discovered a method of preventing

heri-heri many years ago. Many theories seek to account for influenza. The explanation of the scientist is that there lurks some living poison in the earth, and that this is brought forth by certain climatic conditions. The necessary conditions are a hot summer, followed by a cold winter and a rainy spring. During the time of drought the earth is cracked and fissured, and in time receives into these interstices water which lies stagnant and corrupt, to give off, when the hot weather returns, poisonous exhalations which make malaria general. Once infected. men wherever they go carry it with

UNDER WHICH KING?

"The More Postum the More Food-The More Coffee the More Poison."

The Pres. of the W. C. T. U. in a young giant state in the Northwest

"I did not realize that I was a slave to coffee till I seft off drinking it. For three or four years I was obliged to take a nerve tonic every day. Now I am free, thanks to Postum Food Coffee.

"After finding out what coffee will do to its victims, I could hardly stand to have my husband drink it; but he was not willing to quit. I studied for months to find a way to induce him to leave it off. Finally I told him I would make no more coffee.

'I got Postum Food Coffee, and made it strong-boiled it the required time, and had him read the little book, 'The Road to Wellville,' that comes in every

To-day Postum has no stronger advocate than my husband! He tells our friends how to make it, and that he got through the winter without a spell of the grip and has not had a headache for months-he used to be subject to frequent nervous headaches.

The stronger you drink Postum the more food you get; the stronger you drink coffee the more poison you get. Name given by Postum Co., Battle Creek, Mich.

There's a reason

THE UNFAIR TARIFF TAX.

Enormous Profits Paid by the People to the Protected Manufacturers.

The imports of diamonds, pearls and other precious stones have increased during the past year to the remarkable total of \$37,000,000. This is nearly \$11,-000,000 more than in 1904, which was the banner year before this extraordinary increase for this year. It shows the extravagance of the era in which we live and the enormous amount that is annually expended for jewelry. As nearly all the vaule of these importalons of precious stones were diamonds and pearls, uncut and unset, this vast value has been greatly increased, probably by 200 per cent. when cut and set as sold by the retail jewelers.

As the tariff duty on the greater part of these unset jewels is but ten per cent., the millionaires, who mostly buy them, pay but that small tax to support the government. With articles of necessity the tariff tax is much higher. For example: When the same value of medium quality carpets are imported the tariff tax is 44 cents a square yard and in addition thereto 40 per cent, ad valorem, or a total tax of 175 per cent. or over according to the value.

This inequality in the tariff law, which requires the person of moderate means to pay 175 per cent. and over on necessities and the millionaire only ten per cent. on luxuries, pervades the whole law more or less and yet most of the people that pay the tax have voted for Republican congressmen who in turn vote to perpetuate such unequal taxation.

Nor does the unequality of the tax stop there for the protected manufacturers who produce the products taxed by the tariff, add to the price they sell their products for, just about as much as the tariff tax would be on similar products when imported. For instance, if a Brussels carpet is imported, it costs wholesale in the country where it is manufactured, if of medium quality, an average of 32 cents a yard-see imports of carpets page 202 United States Statistical Abstract 1904. The tariff tax on this yard of carpet is 44 cents and 40 per cent. of its value which would be 12-80 cents or a total tax of 56-80 cents, to which must be added the profits of those who import it and the freight and insurance probably 13.20 cents more. Thus the price to the retail carpet merchant would be at least \$1.02 a vard, to which the retailer would add his profit of 20 per cent, or over and

sell it probably for \$1.25 a yard. Now a similar yard of carpet manufactured in Philadelphia would cost the manufacturer about the same price as the foreign carpet cost to produce, which it must be remembered was 32 cents, with the manufacturer's profit included, but as the materials cost 50 to 100 per cent, more in this country than in Europe, because of the protective tariff, and this increases the cost of the manufactured carpet here 25 per cent., the price at which it can be sold here by the manufacturer would be 40 cents a yard. But as the foreign carpet cannot come in and compete, without paying the tariff tax, freight, insurance and profits of the importer, he is protected by the tariff in charging and does charge for "Brussels" carpet from 60 to 80 cents a yard according

to circumstances. So the American consumer pays from 33 to 100 per cent. tariff tax to the carpet trust or combine that is protected by the tariff in plundering him, over and above the ordinary profit of which the government gets nothing.

Vienness Medical society at its last neeting. The voice is a high falletto, but what he said was easily unerstood.

But this is not the worst of t price that the carpet trust or manufacturer charged for similar carpet when sold for export to foreign countries which averaged 40 cents a yard while the people here are charged near-

ly double. Is that a square deal? This is why the Democrats especially demand that the tariff should be revised, so that the trusts cannot sell at a much lower price to foreigners than to our own people.

INSTRUCTING SENATORS.

Those to Be Elected Next Fall Should Be Set Right on Issues.

The senate is now wrestling with the statehood and Philippine tariff questions, with the railroad rate issue to follow. As debate is limited in the senate and any member can propose amendments to bills, there should be no reason why those who have the time to read and digest that interesting publication known as the Congressional Record should not be fully informed on all sides of those issues. As every library in the land has the Record on file or can obtain it by request of congressman or senator representing the district or state in which the library is situated, the oters can keep tab of those who repreent them. If your senators do not talk right they will vote wrong and should be instructed by public meetings as to what are the views of the voters on the issues above noted. Nothing is so sure to keep a senator in the straight and narrow path as instructions from those who are soon to elect a legislature that will elect his successor and there are sena tors to be elected in one-third of the states this fall and another third two years from that time.

Will Get the Pork.

Those representatives that have 'stuck to the administration" are to be rewarded with a special barrel of pork which is to be opened by speaker for their benefit. It is in the nature of a bill for public buildings, carrying an appropriation of \$15,000,-000, which is to be doled out to the good boys that have not run counter to the modus vivendi between the speaker and the president. How the nsurgents will view this, unless there of good rich soil. If the box is not s a fair division will develop later. Republicans seem to legislate on the principle of you tickle me and I'll ickle you.

-Another advantage of Mr. Taft's 50,000 near-soldiers is that when occa-sion requires they can be made to look lke soldiers without, in the meantime in any way interefering with their inlustrial productiveness.-Indianapolis



PARTS OF CORN PLANT.

An Explanation Will Be Helpful to the Man Who Is Growing the Crop.

Every well-developed corn plant consists of primary and secondary roots; the stem, stalk, or culm; the leaves, the flower, and the kernel or seed. The accompanying cut, according to DeWitt C. Wing, the author "The Improvement of Corn in Pennsylvania," shows an entire plant at tasseling time with the various parts identified. In this illustration T represents the tassel; S, stalk; L leaf; E, E, E, ears; N, N, nodes; B, B, brace roots; R, earth roots; G, G, surface of the ground. The illustration to the right shows a spikelet cut lengthwise to expose its two flowers; the one on the right fully open, the other not yet mature. Sk. stalklet; C, C, outer bracts; D, E, inner bracts of the open flower; G. ladicules, which



PARTS OF CORN PLANT SHOWN.

by swelling spread the bracts apart; F. F', filaments cut across; F. filament bearing ripe anther (R A) shedding pollen (P); Y A, young anthers the left-hand one cut to show the pol

While many are more or less familfar with the parts of the corn plant, and the purposes for which each is intended, the following extract from this bulletin contains some information that is interesting:

"The primary roots are fine and fibrous, and are produced in abundance. They are the feeders of the plant. Like other members of the grass family the corn plant has no tap root. For this reason the roots branch out laterally in all directions, and in deep, dry or sandy soils considerable vertical extension is made in the search for moisture. In soils containing adequate moisture the roots grow near the surface. This explains the philosophy of shallow cultivation. Water and plant food are taken up by the root hairs with which the primary roots are provided and conveyed through them to the plant above the

surface The secondary or brace roots begin special function. The writer has al- row until the trees there were well waspecial function. The writer has allow until the trees there were well wa-ways regarded them as emergency tered. Within a week the trees began is that you haven't more.—N. Y. Press. roots; that is, they do not have any to put out new leaves and soon started special work to perform unless an ac- a vigorous growth. cident befalls the plant. If the plant should be blown down or partially up- in Farm and Home, we extended the rooted so that the brace roots on one side were pushed into the soil they would then set about to repair the injury, sending forth primary roots from The past year we extended our plant and themselves and collecting water and toward and against the hills of corn in order to cover the brace roots: they do not require covering, and do ning day and night, and as soon as one not seem to serve any particular purpose except in cases of accident or where the surface soil is continually part. moist and the cultivation deep.

From 12 to 18 leaves, varying in width from two to five inches, are found on mature corn plants of the dent varieties. Part of the leaf is called the sheath, which enfolds a portion of the stem. The leaves exhale and inhale, they are the laboratory of the plant, taking food (carbon dioxide) through their pores from the air and with the aid of the sun working it into plant tissue. This complex process is induced by the action of the sun on the chlorophyll or green coloring matter the leaves contain. The leaves are the most valuable part of the plant, aside from the ear, for

The tassel is the male and the silk the female of the corn plant. Pollen grains are produced by the tassel, from 18,000,000 to twice that number being developed by a healthy tassel. when coming in contact with the female parts or ovules fertilize them. and thus make possible the grain. Silks are hollow, and their ends, which protrude from the husk, are hairy (under the microscope). This enables them to catch pollen grains more readily which fall upon them

Sowing Tomato Seeds. Sow tomato seed seed in the house the last of February, to be sure of early tomato plants. A grocery box seven or eight inches deep will do to sow the seed in. Fill the box full full, the seedlings will be spindling. Select a good variety for earliness and of uniform size. Sow the seed one-quarter inch apart as near as can cover one-half inch, press down the soil, and cover with a soft cloth till the seed is sprouted. Water with warm water. After the plants are two or three inches high, transplant to a larger box filled with good soil They will grow to be good, sticky

GIRDLED TREES.

How They May Be Saved If They Are Worth the Trouble of Preserving.

Usually, when a tree is girdled, it is economy to dig it up and plant another in its place, but occasionally, if a tree is valuable, it may pay to try to save it. If so, the following method may be used with more or less success. In the spring, when the tree is found girdled, take a small chisel and drive it into the bark above and below the girdled portion, as shown in the dotted lines in A. shown below. Then cut some healthy twigs



SAVING THE GIRDLED TREE.

rom the top of the tree (large twigs of the preceding year's growth are more destrable), and cut them a little longer than the distance between the opposite cut in the tree, as shown. Sharpen both ends and bend the twig until both ends can be inserted in the cuts; then press them in until the twig is as nearly straight as possible, taking care that there is a perfect union between the inner bark of the twig and tree. Four or more should be placed around the tree, according to its size, as shown in B. After all the arches are in place the whole should be covered with grafting wax. If the work has been skillfully done the tree will continue to grow; and in a few years will be completely cured except for a slight enlargement. The wound should be closely watched at first, for it makes an excellent harbor for insects. This is only a kind of grafting, explains the Rural New Yorker, the principle being to unite the two portions of the bark with the bark of the twig, which performs the necessary functions until new bark is grown. In grafting it is necessary to remember it is the layer between the bark and the wood, known as the cambium layer, which performs the necessary functions of life, and that this portion of scion and stock must be united before growth will result.

HOME IRRIGATION.

How One Farmer Managed a Small Irrigation Plant for Trees and Garden.

During a very hot, dry season we found young shade trees dying, so decided to try irrigation on a small and save scale, them if possible, Accordingly we

procured an barrel, sawed it in halves and in the bottom put a pipe, a, leading to the stock tank. Near the top of the half barrel we made another opening, fitted in a short pipe, b, and with the aid of a short rough, c, carried the surplus water to a small basin which we dug in the ground about six feet from the windmill. From this basin two ditches, about six inches across the top, were dug, one running to each row of trees which were set in two rows along the path running

Thus encouraged, continues the writer ditches to the flower garden where everything was brown and dead. Scon there was a decided transformation. by means of branch ditches from one food. It is a mistake to throw dirt main ditch irrigated a good-sized garden and strawberry patch. All through the dry weather the windmill was kept runpart of the garden got thoroughly soaked the water was turned on another

CROSS-FERTILIZATION.

The More Certain Method of Science Which Is Improving the Quality of Cereals.

Within recent years new varieties of wheat have been produced by crossfertilizing. Most of the varieties of wheat produced by nature have been produced by cross-fertilization accidentally obtained. It has taken nature | tion after another of their family are, as a long time to produce a few good a rule, inclined to submit to them as invarieties. Our scientists who have taken hold of the matter by pollenizing varieties with a pollen from other strong varieties, have been able to outstrip nature in the work of producing good varieties. The evolution of the wheat plant is thus taken out of given. the domain of chance and introduced These grains contain live germs which into the domain of science. Under the old regime a good variety was more likely to be pollenized by a poor variety than otherwise, because poor varieties are more numerous than good varieties. Man, however, is able to combine the good qualities of the strongest cereals and by selecting the best of their progeny get immediate results. There are to-day 40 or 50 varieties of wheat that have been thus created. Such varieties have longer heads, heavier grain and produce larger yields per acre than the old varieties and are at the same time better able to stand adverse condition. Within the next 25 years, says the Farmers' Review, we shall see the science of wheat growing develop greatly, with the result of more fully using the land devoted to wheat growing. Hard wheats will be evolved for use on the semi-arid lands, while softer wheats resistant to fungous diseases will be produced for humid localities.

Plug up the holes in your milk pails, but don't do it with old rags. Solder

HIGH CLASS DRUGGISTS

AND - OTHERS.

The better class of druggists, everywhere, are men of scientific attainments and high integrity, who devote their lives to the welfare of their fellow men in supplying the best of remedies and purest medicinal agents of known value, in accordance with physicians' prescriptions and scientific formula. Druggists of the better class manufacture many excellent remedies, but always under original or officinal names and they never sell false brands, or imitation medicines. They are the men to deal with when in need of anything in their line, which usually includes all standard remedies and corresponding adjuncts of a first-class pharmacy and the finest and best of toilet articles and preparations and many useful accessories and remedial appliances. The earning of a fair living, with the satisfaction which arises from a knowledge of the benefits conferred upon their patrons and assistance to the medical profession, is usually their greatest reward for long years of study and many hours of daily toil. They all know that Syrup of Figs is an excellent laxative remedy and that it gives universal satisfaction, and therefore they are selling many millions of bottles annually to the well informed purchasers of the choicest remedies, and they always take pleasure in handing out the genuine article bearing the full name of the Company—California Fig Syrup Co.—printed on the front of every package. They know that in cases of colds and headaches attended by biliousness and constipation and of weakness or torpidity of the liver and bowels, arising from irregular habits, indigestion, or over-eating, that there is no other remedy so pleasant, prompt and beneficial in its effects as Syrup of Figs, and they are glad to sell it because it gives universal satisfaction.

Owing to the excellence of Syrup of Figs, the universal satisfaction which it gives and the immense demand for it, imitations have been made, tried and condemned, but there are individual druggists to be found, here and there, who do not maintain the dignity and principles of the profession and whose greed gets the better of their judgment, and who do not hesitate to recommend and try to sell the imitations in order to make a larger profit. Such preparations sometimes have the name-" Syrup of Figs"-or "Fig Syrup" and of some piratical concern, or fictitious fig syrup company, printed on the package, but they never have the full name of the Company-California Fig Syrup Co.-printed on the front of the package. The imitations should be rejected because they are injurious to the system. In order to sell the imitations they find it necessary to resort to misrepresentation or deception, and whenever a dealer passes off on a customer a preparation under the name of "Syrup of Figs" or "Fig Syrup," which does not bear the full name of the California Fig Syrup Co. printed on the front of the package, he is attempting to deceive and mislead the patron who has been so unfortunate as to enter his establishment, whether it be large or small, for if the dealer resorts to misrepresentation and and deception in one case he will do so with other medicinal agents, and in the filling of physicians' prescriptions, and should be avoided by every one who values health and happiness. Knowing that the great majority of druggists are reliable, we supply the immense demand for our excellent remedy entirely through the druggists, of whom it may be purchased everywhere, in original packages only, at the regular price of fifty cents per bottle, but as exceptions exist it is necessary to inform the public of the facts, in order that all may decline or return any imitation which may be sold to them. If it does not bear the full name of the Company-California Fig Syrup Co .- printed on the front of every package, do not hesitate to return the article and to demand the return of your money, and in future go to one of the better class of druggists who will sell you what you wish and the best of everything in his line at reasonable prices.

The man who thinks he is a wit should talk into a phonograph—and then be made to listen.—Saturday Evening Post.

TERRIBLE SCALY ECZEMA.

Eruptions Appeared on Chest, and Jace and Neck Were All Broken Out-Cured by Cuticura.

"I had an eruption appear on my chest and body and extend upwards and downwards, so that my neck and face were all broken out; also my arms and the lower limbs as far as the knees. I at first thought it was prickly heat. But soon scales or crusts formed where the breaking out was. Instead of going to a physician, I purchased a complete treatment of the Cuticura Remedies, in which I had great faith, and all was satisfactory. A year or two later the eruption appeared again, only a little lawer; but before it had time to spread I procured another supply of the Cuticura Remedies, and continued their use until the cure was complete. It is now five years since the last attack, and have not seen any signs of a olete. It is now five years since the last attack, and have not seen any signs of a return. I have more faith in Cuticura Remelies for skin diseases than anything I know of. Emma E. Wilson, Liscomb, Iowa, Oct. 1, 1905."

Many a man whom we think has a big beart only has a patient ear.—N. O. Pica-

Garfield Tea, Mild Laxative.

To Cure a Cold in One Day Take Laxative Bromo Quinine Tablets.
Druggists refund money if it falls to cure.
E.W. Grove's signature is on each box. 25a

From His Point of View. Little Andrew—Papa, what do people mean when they talk about "the big stick?"

Papa (member of congress from the Umpteenth district)—Any United States senator, my son.—Chicago Tribune.

Made Quite a Hit. Briggs—Bilter's daughter did very well in iterature, didn't she? Griggs—Yes, indeed. I understand that she made money enough on her first novel to get herself an education.—Life.

Fashion writer says: "One can get a real cute layette for a baby for \$8,000." Wouldn't that make you join a Race Suicide Club?—N. Y. Herald.

TWITCHING NERVES

A Serious Hereditary Trouble Cured By Dr. Williams' Pink Pills.

Sufferers from ailments that have afflicted in regular succession one generaevitable. The case which follows proves that such hereditary difficulties are not beyond the reach of curative forces and should inspire hopefulness and a readiness to try remedies that have effected signal cures, such as that which is here

Mrs. Elizabeth Rannells, of No. 408 East Seventh street, Newton, Kansas, gives the following account of her nil-

ent and her cure:
"For two years I suffered from a trying nervousness in my lower limbs from my nervousness in my lower limbs from my knees down, as my mother and my grandmother had suffered before mo. The situation was for many years ac-cepted as unavoidable because hereditary. But about two years ago, when my son was realizing benefit from the use of Dr. Williams' Pink Pills, I thought there might possibly be some good in them for me. My trouble had then become so serious as to make it difficult for me to serious as to make it difficult for me to sleep. I often had to walk the floor in restlessness the whole night. After taking some six boxes the twitching disappeared and I ceased to use the remedy. I evidently stopped a little too soon for nervousness came back after a mouth or so and I used the pills again for a short time. Relief came at once and since I stopped using them the second time I have been free from any return of the twitchings or from any interference with my sleep."

my sleep."
Dr. Williams' Pink Pills have cured Dr. Williams Pink Pills have cured the worst cases of bloodlessness, indigestion, influenza, headaches, lumbago, sciatica, neuralgia, nervousness, spinal weakness and the special ailments of girls and women. For further information, address the Dr. Williams Medicine Co., Schenectady, N. Y.

Among other lost arts is that of keeping one's mouth closed when there's nothing more to say.—Chicago Daily News.

To Cuba, Every Friday, the Havana Limited.

Limited.

A swell Pullman train of dining car, club car with smoking room, barber shop and bath room, with barber and valet in attendance; stateroom, drawing room and observation sleeping cars, leaves St. Louis at 9:45 P. M. via the Mobile and Ohio R. R., and arrives at the steamship docks at Mobile at 3:00 P. M. Saturdays. On arrival of the Havana Limited, the palatial nineteen-knot, twin-screw S. S. "Prince George" sails, and passes into the harbor of Havana at sunrise Mondays.

Returning, the S. S. "Prince George" sails from Havana at 5:00 P. M. Wednesdays, arriving at Mobile at daylight Fridays, and the Havana Limited leaves the steamship docks at 9:00 A. M. and arrives at St. Louis Saturday mornings. A delightful week's outing—inexpensive and full of interest. Low rate excursion tickets good for six months. Call on your home Agent or write Jno. M. Beall, General Passenger Agent, St. Louis.

When it does not exceed his own a man can afford to rejoice in his neighbor's good

eral Passenger Agent, St. Louis.

Lewis' Single Binder straight 5c ciger. Made of extra quality tobacco. Yer or Lewis' Factory, Peoria, Ill.

The Japanese emperor likes beans. Ban-

THE BEST COUGH CHEF ?

A well-known Rochester lady says: "I stayed in the Adirondacks, away from friends and home, two winters before I found that by

Kemp's Balsam

I could subdue the cough that drove me away from home and seemed likely to never allow me to live there in winter." Kemp's Balsam will cure any cough that can be cured by any medicine.

Sold by all dealers at 25c. and 5oc. ic

They also relieve Dis direction and Too Hearty ating. A perfect rem edy for Dizziness, Nausea Drowsiness, Bad Taste in the Mouth, Coated

Tongue, Pain in the Side, TORPID LIVER. They regulate the Bowels. Purely Vegetable SMALL PILL. SMALL DOSE. SMALL PRICE

Genuine Must Bear CARTERS Fac-Simile Signature REFUSE SUBSTITUTES.

Work for Yourself Southwest



and own a Home

There's a place Southwest for you It can't come to you, but you can go to it. Perhaps that place is in Kansas, or Colorado, or New Mexico. It may be in Texas or California.

the regions named, and try to fully answer your questions. Write to-day to Gen. Colo-nization Agt., A. T.& S. F. Ry., Railway Exchange, Chicago.

SLOAN'S LINIMENT For Your Family and Your Horse The Best Antiseptic Known. TRY IT FOR Rheumatism, Strains, Sprains, Swellings and Enlargements. Price, 25c., 50c. and \$1.00.

Dr. EARL S. SLOAN, 615 Albany St., Boston, Mass.

